

### AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

#### LISTING OF CLAIMS

1. (Currently Amended) A method to compensate for process variations when printing a pattern on a workpiece, said method comprising:

determining a two-dimensional critical dimension (CD) ~~profile~~ distribution ~~[[in]]~~  
associated with said pattern printed on said workpiece,  
generating a two-dimensional compensation file to equalize ~~fluctuations~~ variations in said  
two-dimensional CD ~~profile~~ distribution, and  
patterning a workpiece ~~[[with]]~~ using said two-dimensional compensation file.

2. (Currently Amended) The method of claim 1, wherein said determining includes predicting the two-dimensional CD ~~profile~~ distribution.

3. (Currently Amended) The method of claim 1, wherein said determining includes measuring the two-dimensional CD ~~profile~~ distribution.

4. (Original) The method of claim 1, wherein said two-dimensional compensation file includes pattern data.

5. (Original) The method of claim 1, wherein said two-dimensional compensation file includes dose compensation data.
6. (Original) The method of claim 1, wherein said two-dimensional compensation file is a correction map.
7. (Original) The method of claim 1, wherein said two-dimensional compensation file is a two-dimensional dose compensation profile.
8. (Currently Amended) A method to compensate for process variations when printing a pattern on a workpiece, said method comprising:
- determining a two-dimensional critical dimension (CD) profile distribution ~~[[in]]~~ associated with said pattern printed on said workpiece,
  - generating a two-dimensional dose compensation profile to equalize ~~fluctuations~~ variations in said two-dimensional CD-~~profile distribution~~, and
  - patterning a workpiece ~~[[with]]~~ using said two-dimensional dose compensation profile.
9. (Currently Amended) A method to compensate for process variations when printing a pattern on a workpiece, said method comprising:
- predicting a two-dimensional critical dimension (CD) profile distribution ~~[[in]]~~ associated with said pattern to be printed on said workpiece,
  - generating a two-dimensional dose compensation profile to equalize ~~fluctuations~~ variations in said ~~[[2-dim]]~~ two-dimensional CD-~~profile distribution~~,

patterning the workpiece [[with]] using said [[2-dim]] two-dimensional dose compensation profile.

10. (New) An apparatus for process variation compensation when printing a pattern on a workpiece, said apparatus comprising:

a measuring device for determining a two-dimensional critical dimension (CD) distribution associated with said pattern printed on said workpiece and generating a two-dimensional compensation file to equalize variations in said two-dimensional CD distribution;  
and

a writing device for patterning a workpiece using said two-dimensional compensation file.